

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 31-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01600-JD3

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Carter  
City:  
Lat: 36.19707  
Long: -82.105  
Universal Transverse Mercator Folder UTM List  
*UTM list determined by folder location*  
▶ NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
▶ NAD83 / UTM zone 37S  
Name of nearest waterbody: George Creek  
Name of nearest Traditional Navigable Water (TNW): Doe River  
Name of watershed or Hydrologic Unit Code (HUC): 6010103



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 04-Nov-2008



Field Determination Date(s): ☐ 15-Oct-2008

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
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200801600: UT-1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200801600: WL3	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200801600: WLPocket	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: (m²)  
Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]  
OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

**1. TNW**  
Not Applicable.

**2. Wetland Adjacent to TNW**  
Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: [ ]  
Drainage area: [ ]  
Average annual rainfall: inches  
Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

- ☐ Tributary flows directly into TNW.  
☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.  
Project waters are [ ] river miles from RPW.  
Project Waters are [ ] aerial (straight) miles from TNW.  
Project waters are [ ] aerial(straight) miles from RPW.

☐  
Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Order	Tributary Name
2	200801600: UT-1

(b) General Tributary Characteristics:  
Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801600: UT-1	-	-	-	X	Agricultural impacts

Tributary properties with respect to top of bank (estimate):

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801600: UT-1	4	3	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801600: UT-1	X	X	-	-	X	-	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801600: UT-1	eroded banks through pasture, but more stable along road ROW	-	Meandering	2

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801600: UT-1	Perennial flow	-	-	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
200801600: UT-1	Confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801600: UT-1	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801600: UT-1	X	X	-	-

Tributaries with OHWM<sup>6</sup> - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801600: UT-1	X	X	-	-	-	-	-	-	-	-	-	-	

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:  
Not Applicable.

Mean High Water Mark indicated by:  
Not Applicable.

(iii) Chemical Characteristics:  
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known

200801600: UT-1	Clear at time of inspection	unknown
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**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801600: UT-1	X	-	X	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

**Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
200801600: WL3	.42	emergent	-	-
200801600: WLpocket	.01	emergent	-	-

**(b) General Flow Relationship with Non-TNW:**

**Flow is:**

Wetland Name	Flow	Explain
200801600: WL3	Perennial flow.	-
200801600: WLpocket	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200801600: WL3	-	-
200801600: WLpocket	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801600: WL3	Unknown	-	-
200801600: WLpocket	Unknown	-	-

**(c) Wetland Adjacency Determination with Non-TNW:**

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200801600: WL3	Yes	-	-	-
200801600: WLpocket	Yes	-	-	-

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Lat: 36.19707  
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Waters UTM List  
*UTM list determined by waters location*  
▶ NAD83 / UTM zone 37S  
Name of nearest waterbody: George Creek  
Name of nearest Traditional Navigable Water (TNW): Doe River  
Name of watershed or Hydrologic Unit Code (HUC): 6010103



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



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## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
------------	-----------------------

200801600: George Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200801600: WL1	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200801600: WL1a	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: (m²)  
Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]  
OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

**1. TNW**  
Not Applicable.

**2. Wetland Adjacent to TNW**  
Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: [ ]  
Drainage area: [ ]  
Average annual rainfall: inches  
Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

☐ Tributary flows directly into TNW.  
☐ Tributary flows through [ ] tributaries before entering TNW.  
:Number of tributaries

Project waters are [ ] river miles from TNW.  
Project waters are [ ] river miles from RPW.  
Project Waters are [ ] aerial (straight) miles from TNW.  
Project waters are [ ] aerial(straight) miles from RPW.

☐  
Project waters cross or serve as state boundaries.  
Explain:  
Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Order	Tributary Name
-	200801600: George Creek

(b) General Tributary Characteristics:  
Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801600: George Creek	-	-	-	X	agriculture impacts

Tributary properties with respect to top of bank (estimate):

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801600: George Creek	4	1	3:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801600: George Creek	X	X	-	-	-	X	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801600: George Creek	stable with some eroding banks due to livestock impact	-	Meandering	1

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801600: George Creek	Perennial flow	-	-	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
200801600: George Creek	Confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801600: George Creek	-	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801600: George Creek	X	X	-	-

Tributaries with OHWM<sup>6</sup> - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801600: George Creek	X	X	-	-	-	-	-	-	-	-	-	-	

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:  
Not Applicable.

Mean High Water Mark indicated by:  
Not Applicable.

(iii) Chemical Characteristics:  
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

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Tributary Name	Explain	Identify specific pollutants, if known
200801600: George Creek	clear, but watershed is impacted by agriculture	unknown

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801600: George Creek	-	-	-	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

**Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
200801600: WL1	.28	riverine	-	-
200801600: WL1a	.17	Riverine	-	-

**(b) General Flow Relationship with Non-TNW:**

**Flow is:**

Wetland Name	Flow	Explain
200801600: WL1	Perennial flow.	-
200801600: WL1a	Perennial flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200801600: WL1	-	-
200801600: WL1a	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801600: WL1	Unknown	-	-
200801600: WL1a	Unknown	-	-

**(c) Wetland Adjacency Determination with Non-TNW:**

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200801600: WL1	Yes	-	-	-
200801600: WL1a	Yes	-	-	-

**(d) Proximity (Relationship) to TNW:**

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200801600: WL1	1 (or less)	1 (or less)	Wetland to navigable waters	-
200801600: WL1a	1 (or less)	1 (or less)	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Wetland Name	Explain	Identify specific pollutants, if known
200801600: WL1	-	-
200801600: WL1a	-	-

**(iii) Biological Characteristics. Wetland supports:**

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
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200801600: WL1	-	-	-	-
200801600: WL1a	-	-	-	-

### 3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Significant Nexus:** Not Applicable

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

### 1. TNWs and Adjacent Wetlands:

Not Applicable.

### 2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
200801600: George Creek	PERENNIAL	Flow noted in channel during drought that was not response to rain

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801600: George Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	457.2	-
<b>Total:</b>		<b>457.2</b>	<b>0</b>

### 3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

### 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
200801600: WL1	PERENNIAL	-
200801600: WL1a	PERENNIAL	-

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801600: WL1	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	1141.213392
200801600: WL1a	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	704.152944

<b>Total:</b>		<b>0</b>	<b>1845.366336</b>
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**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

☐

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

## SECTION IV: DATA SOURCES.

**A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Brushy Fork Environmental Consulting	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-
----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	White Rocks Mountain, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	supplied by applicant	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 15-Oct-2008	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

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**U.S. Army Corps of Engineers**

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 13-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01709-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Sevier  
City: Gatlinburg  
Lat: 35.727461  
Long: -83.543563  
Universal Transverse Mercator Folder UTM List  
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▶ NAD83 / UTM zone 36S  
Waters UTM List  
*UTM list determined by waters location*  
▶ NAD83 / UTM zone 36S  
Name of nearest waterbody: Norton Creek  
Name of nearest Traditional Navigable Water (TNW): West Prong Little Pigeon River  
Name of watershed or Hydrologic Unit Code (HUC): 6010107



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



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**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 17-Oct-2008



Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
------------	-----------------------

**b. Identify (estimate) size of waters of the U.S. in the review area:**Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

## SECTION III: CWA ANALYSIS

**A. TNWs AND WETLANDS ADJACENT TO TNWs****1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):****1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size: [ ]

Drainage area: [ ]

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics****(a) Relationship with TNW:**☐ Tributary flows directly into TNW.☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.

Project waters are [ ] river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>**Tributary Stream Order, if known:**

Order	Tributary Name
-	200801709

**(b) General Tributary Characteristics:**

**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801709	X	-	-	-	-

**Tributary properties with respect to top of bank (estimate):**

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801709	12	4	2:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801709	-	-	-	X	X	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801709	stable	-	Meandering	2.5

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801709	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200801709	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801709	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801709	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801709	X	X	-	-	-	-	-	-	-	-	-	-	

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:****Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Tributary Name	Explain	Identify specific pollutants, if known
200801709	Clear	unknown

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801709	-	-	-	-	-

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:

Not Applicable.

Surface flow is:

Not Applicable.

Subsurface flow:

Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:

Not Applicable.

(d) Proximity (Relationship) to TNW:

Not Applicable.

(ii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Not Applicable.

(iii) Biological Characteristics. Wetland supports:

Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
200801709	PERENNIAL	-

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801709	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	1219.2	-
Total:		1219.2	0

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>

Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐



Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

## SECTION IV: DATA SOURCES.

### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Gatlinburg, Tennessee	-
--Photographs	-	-
----Aerial	ORM2	-

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 03-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01657-JD3

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State :	TN - Tennessee
County/parish/borough:	Anderson
City:	Oak Ridge
Lat:	36.0022399989017
Long:	-84.18305999999995
Universal Transverse Mercator	<u>Folder UTM List</u> <i>UTM list determined by folder location</i> ▶ NAD83 / UTM zone 37S
	<u>Waters UTM List</u> <i>UTM list determined by waters location</i> ▶ NAD83 / UTM zone 37S

Name of nearest waterbody: Clinch River

Name of nearest Traditional Navigable Water (TNW): Clinch River

Name of watershed or Hydrologic Unit Code (HUC): 6010207



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 03-Oct-2008



Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

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**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: The proposed project is located on a navigable water located within the regulatory jurisdiction of the Nashville District Corps of Engineers. The Nashville District has previously determined the extent of navigable waters within the drainage areas of the Tennessee and Cumberland Rivers located within the states of Tennessee, Kentucky, Alabama, and Mississippi.

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
200801657 WL	Wetlands adjacent to TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: [ ]

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. TNW

Not Applicable.

2. Wetland Adjacent to TNW

Wetland Name	Summarize rationale supporting conclusion that wetland is "adjacent":
200801657 WL	-

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: [ ]

Drainage area: [ ]

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.

Project waters are [ ] river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.

☐

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

Tributary Stream Order, if known:

Not Applicable.

**(b) General Tributary Characteristics:**

**Tributary is:**

Not Applicable.

**Tributary properties with respect to top of bank (estimate):**

Not Applicable.

**Primary tributary substrate composition:**

Not Applicable.

**Tributary (conditions, stability, presence, geometry, gradient):**

Not Applicable.

**(c) Flow:**

Not Applicable.

**Surface Flow is:**

Not Applicable.

**Subsurface Flow:**

Not Applicable.

**Tributary has:**

Not Applicable.

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:**

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iv) Biological Characteristics. Channel supports:**

Not Applicable.

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

**Properties:**

Not Applicable.

**(b) General Flow Relationship with Non-TNW:**

**Flow is:**

Not Applicable.

**Surface flow is:**

Not Applicable.

**Subsurface flow:**

Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:  
Not Applicable.

(d) Proximity (Relationship) to TNW:  
Not Applicable.

(ii) Chemical Characteristics:  
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Not Applicable.

(iii) Biological Characteristics. Wetland supports:  
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):  
All wetlands being considered in the cumulative analysis:  
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:  
Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801657 WL	Wetlands adjacent to TNWs	-	1214.0568
Total:		0	1214.0568

2. RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  
Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

#### **F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

☐

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

## **SECTION IV: DATA SOURCES.**

---

**A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Cannon & Cannon, Inc	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	Tennessee Valley Authority	-
----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Clinton, Tennessee quad	-
--Photographs	-	-
----Aerial	ORM2	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 03-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01657-JD2

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Anderson  
City: Oak Ridge  
Lat: 36.0022399989017  
Long: -84.18305999999995  
Universal Transverse Mercator Folder UTM List  
*UTM list determined by folder location*  
▶ NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
▶ NAD83 / UTM zone 37S

Name of nearest waterbody: Clinch River  
Name of nearest Traditional Navigable Water (TNW): Clinch River  
Name of watershed or Hydrologic Unit Code (HUC): 6010207



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 03-Oct-2008



Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
------------	-----------------------



**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: (m²)  
Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]  
OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

**1.TNW**  
Not Applicable.

**2. Wetland Adjacent to TNW**  
Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: 620 square miles  
Drainage area: 60 acres  
Average annual rainfall: 35 inches  
Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

- ☒ Tributary flows directly into TNW.
- ☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 1 (or less) river miles from TNW.  
Project waters are 1 (or less) river miles from RPW.  
Project Waters are 1 (or less) aerial (straight) miles from TNW.  
Project waters are 1 (or less) aerial(straight) miles from RPW.

☐  
Project waters cross or serve as state boundaries.  
Explain:

Identify flow route to TNW:<sup>5</sup>  
Unnamed tributary to Clinch River (Melton Hill Lake)

**Tributary Stream Order, if known:**

Order	Tributary Name
-	200801657 str2

**(b) General Tributary Characteristics:**

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801657 str2	-	-	-	-	-

**Tributary properties with respect to top of bank (estimate):**

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801657 str2	-	-	-

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801657 str2	-	-	-	-	-	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801657 str2	-	-	-	-

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801657 str2	-	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200801657 str2	-	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801657 str2	-	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801657 str2	-	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
200801657 str2	-	-

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801657 str2	-	-	-	-	-

## 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

### (i) Physical Characteristics:

#### (a) General Wetland Characteristics:

##### Properties:

Not Applicable.

#### (b) General Flow Relationship with Non-TNW:

##### Flow is:

Not Applicable.

##### Surface flow is:

Not Applicable.

##### Subsurface flow:

Not Applicable.

#### (c) Wetland Adjacency Determination with Non-TNW:

Not Applicable.

#### (d) Proximity (Relationship) to TNW:

Not Applicable.

### (ii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Not Applicable.

### (iii) Biological Characteristics. Wetland supports:

Not Applicable.

## 3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

## C. SIGNIFICANT NEXUS DETERMINATION

---

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Findings for:** 200801657 str2

Tributary provide direct route for any fill to reach TNW.

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

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### 1. TNWs and Adjacent Wetlands:

Not Applicable.

### 2. RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801657 str2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	365.76	-
Total:		365.76	0

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>  
Not Applicable.

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:
- ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):
- ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):



Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

## SECTION IV: DATA SOURCES.

### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Cannon & Cannon, Inc	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	Tennessee Valley Authority	-
----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Clinton, Tennessee quad	-
--Photographs	-	-
----Aerial	ORM2	-

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 02-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01657-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Anderson  
City: Oak Ridge  
Lat: 36.0022399989017  
Long: -84.18305999999995  
Universal Transverse Mercator Folder UTM List  
*UTM list determined by folder location*  
▶ NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
▶ NAD83 / UTM zone 37S  
Name of nearest waterbody: Clinch River  
Name of nearest Traditional Navigable Water (TNW): Clinch River  
Name of watershed or Hydrologic Unit Code (HUC): 6010207



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 03-Oct-2008



Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
------------	-----------------------

**b. Identify (estimate) size of waters of the U.S. in the review area:**Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS****A. TNWs AND WETLANDS ADJACENT TO TNWs****1.TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):****1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size: [ ]

Drainage area: [ ]

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics****(a) Relationship with TNW:**☐ Tributary flows directly into TNW.☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.

Project waters are [ ] river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>**Tributary Stream Order, if known:**

Order	Tributary Name
1	200801657 str1

**(b) General Tributary Characteristics:**

**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801657 str1	X	-	-	-	-

**Tributary properties with respect to top of bank (estimate):**

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801657 str1	2	2	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801657 str1	X	X	-	-	-	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801657 str1	-	-	Relatively straight	-

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801657 str1	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200801657 str1	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801657 str1	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801657 str1	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801657 str1	X	X	-	-	-	-	-	-	-	-	-	-	

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
200801657 str1	-	-



(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801657 str1	-	-	-	-	-

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:

Not Applicable.

Surface flow is:

Not Applicable.

Subsurface flow:

Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:

Not Applicable.

(d) Proximity (Relationship) to TNW:

Not Applicable.

(ii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Not Applicable.

(iii) Biological Characteristics. Wetland supports:

Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:  
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
200801657 str1	PERENNIAL	Consultant classified stream at perennial based on field observations

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801657 str1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	457.2	-
Total:		457.2	0

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>  
Not Applicable.

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS



If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**  
Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**  
Not Applicable.

SECTION IV: DATA SOURCES.

**A. SUPPORTING DATA. Data reviewed for JD**  
(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Cannon & Cannon, Inc	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	Tennessee Valley Authority	-
----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Clinton, Tennessee quad	-
--Photographs	-	-
----Aerial	-	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**  
Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.  
<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).  
<sup>3</sup>-Supporting documentation is presented in Section III.F.  
<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.  
<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.  
<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.  
<sup>7</sup>-Ibid.  
<sup>8</sup>-See Footnote #3.  
<sup>9</sup> -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 23-Sep-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01139-JD3

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Johnson  
City:  
Lat: 36.344728058951965  
Long: -81.71242383906077  
Universal Transverse Mercator: 17N  
Name of nearest waterbody: Roan Creek  
Name of nearest Traditional Navigable Water (TNW): Watauga River  
Name of watershed or Hydrologic Unit Code (HUC): 6010103



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 29-Sep-2008



☐ 07-Aug-2008

Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
200801139 RPW3	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200801139 WL3A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200801139 WL3B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m²)  
Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: [ ]  
OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW  
Not Applicable.

2. Wetland Adjacent to TNW  
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 870 square miles  
Drainage area: 60 acres  
Average annual rainfall: 51 inches  
Average annual snowfall: 30 inches

(ii) Physical Characteristics

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.  
☒ Tributary flows through [ ] tributaries before entering TNW.  
:Number of tributaries

Project waters are 10-15 river miles from TNW.  
Project waters are 1 (or less) river miles from RPW.  
Project Waters are 5-10 aerial (straight) miles from TNW.  
Project waters are 1 (or less) aerial(straight) miles from RPW.

☐  
Project waters cross or serve as state boundaries.  
Explain:

Identify flow route to TNW:<sup>5</sup>  
Unnamed tributary to Roan Creek to Watauga River (Watauga Lake)

Tributary Stream Order, if known:

Order	Tributary Name
1	200801139 RPW3

(b) General Tributary Characteristics:  
Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain

200801139 RPW3	X	-	-	-	-
----------------	---	---	---	---	---

**Tributary properties with respect to top of bank (estimate):**

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801139 RPW3	2	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801139 RPW3	X	X	-	-	-	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801139 RPW3	stable	steep slope, all riffle	Relatively straight	10

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801139 RPW3	Intermittent but not seasonal flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200801139 RPW3	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801139 RPW3	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801139 RPW3	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801139 RPW3	X	X	-	X	-	-	-	-	-	-	-	-	

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:**

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
200801139 RPW3	clear at time of inspection	unknown

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801139 RPW3	-	-	X	-	-

## 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

### (i) Physical Characteristics:

#### (a) General Wetland Characteristics:

##### Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
200801139 WL3A	.01	emergent	-	-
200801139 WL3B	.24	emergent	-	-

#### (b) General Flow Relationship with Non-TNW:

##### Flow is:

Wetland Name	Flow	Explain
200801139 WL3A	Intermittent flow.	-
200801139 WL3B	Intermittent flow.	-

##### Surface flow is:

Wetland Name	Flow	Characteristics
200801139 WL3A	Overland sheetflow	-
200801139 WL3B	Overland sheetflow	-

##### Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801139 WL3A	Unknown	-	-
200801139 WL3B	Unknown	-	-

#### (c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200801139 WL3A	Yes	-	-	-
200801139 WL3B	Yes	-	-	-

#### (d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200801139 WL3A	10-15	5-10	Wetland to navigable waters	-
200801139 WL3B	10-15	5-10	Wetland to navigable waters	-

### (ii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Wetland Name	Explain	Identify specific pollutants, if known
200801139 WL3A	-	unknown
200801139 WL3B	-	unknown

### (iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200801139 WL3A	X	-	-	-
200801139 WL3B	X	-	-	-

## 3. Characteristics of all wetlands adjacent to the tributary (if any):



**All wetlands being considered in the cumulative analysis:**  
Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**  
Not Applicable.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Findings for:** 200801139 RPW3, 200801139 WL3A, 200801139 WL3B

Wetlands are part of the head water network of Roan Creek, a major tributary to the Watauga River. Fill in the wetlands could result in decreased water quality for both Roan Creek and the Watauga River.

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

**1. TNWs and Adjacent Wetlands:**  
Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Wetland Name	Flow	Explain
200801139 RPW3	SEASONAL	-

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801139 RPW3	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	60.96	-
<b>Total:</b>		<b>60.96</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**  
Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**  
Not Applicable.

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Wetland Name	Flow	Explain
200801139 WL3A	SEASONAL	-
200801139 WL3B	SEASONAL	-

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801139 WL3A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	28.327992
200801139 WL3B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	951.01116
<b>Total:</b>		<b>0</b>	<b>979.339152</b>

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>  
Not Applicable.

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:  
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.  
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD  
(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-

----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Zionville, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	supplied by Brushy Fork Consulting	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 23-Sep-2008	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 23-Sep-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01139-JD2

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Johnson  
City:  
Lat: 36.344728058951965  
Long: -81.71242383906077  
Universal Transverse Mercator: 17N  
Name of nearest waterbody: Roan Creek  
Name of nearest Traditional Navigable Water (TNW): Watauga River  
Name of watershed or Hydrologic Unit Code (HUC): 6010103



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 29-Sep-2008



☐ 07-Aug-2008

Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
200801139 RPW2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200801139 WL2A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200801139 WL2B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200801139 WL2C	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

## SECTION III: CWA ANALYSIS

**A. TNWs AND WETLANDS ADJACENT TO TNWs****1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):****1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size: 870 square miles

Drainage area: 60 acres

Average annual rainfall: 51 inches

Average annual snowfall: 30 inches

**(ii) Physical Characteristics****(a) Relationship with TNW:**☐ Tributary flows directly into TNW.☒ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 10-15 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project Waters are 5-10 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

Unnamed tributary to Roan Creek to Watauga River (Watauga Lake)

**Tributary Stream Order, if known:**

Order	Tributary Name
1	200801139 RPW2

(b) General Tributary Characteristics:  
Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801139 RPW2	X	-	-	-	-

Tributary properties with respect to top of bank (estimate):

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801139 RPW2	2	1	3:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801139 RPW2	X	X	-	-	-	-	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801139 RPW2	stable	steep slope, all riffle	Relatively straight	10

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801139 RPW2	Intermittent but not seasonal flow	-	-	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
200801139 RPW2	Discrete and confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801139 RPW2	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801139 RPW2	X	X	-	-

Tributaries with OHWM<sup>6</sup> - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801139 RPW2	X	X	-	X	-	-	-	-	-	-	-	-	

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:  
Not Applicable.

Mean High Water Mark indicated by:  
Not Applicable.

(iii) Chemical Characteristics:  
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known

200801139 RPW2	Clear at time of inspection	unknown
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**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801139 RPW2	-	-	X	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

**Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
200801139 WL2A	.05	emergent	-	-
200801139 WL2B	.01	enmergent	-	-
200801139 WL2C	.01	emergent	-	-
200801139 WL2D	.12	emergent	-	-

**(b) General Flow Relationship with Non-TNW:**

**Flow is:**

Wetland Name	Flow	Explain
200801139 WL2B	Intermittent flow.	-
200801139 WL2C	Intermittent flow.	-
200801139 WL2D	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200801139 WL2A	-	-
200801139 WL2B	Overland sheetflow	-
200801139 WL2C	Overland sheetflow	-
200801139 WL2D	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801139 WL2A	-	-	-
200801139 WL2B	Unknown	-	-
200801139 WL2C	Unknown	-	-
200801139 WL2D	Unknown	-	-

**(c) Wetland Adjacency Determination with Non-TNW:**

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200801139 WL2A	Yes	-	-	-
200801139 WL2B	Yes	-	-	-
200801139 WL2C	Yes	-	-	-
200801139 WL2D	Yes	-	-	-

**(d) Proximity (Relationship) to TNW:**

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200801139 WL2A	10-15	5-10	Wetland to navigable waters	-
200801139 WL2B	10-15	5-10	Wetland to navigable waters	-
200801139 WL2C	10-15	5-10	Wetland to navigable waters	-

200801139 WL2D	10-15	5-10	Wetland to navigable waters	-
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**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Wetland Name	Explain	Identify specific pollutants, if known
200801139 WL2A	-	unknown
200801139 WL2B	-	unknown
200801139 WL2C	-	unknown
200801139 WL2D	-	unknown

**(iii) Biological Characteristics. Wetland supports:**

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200801139 WL2A	-	-	-	-
200801139 WL2B	-	-	-	-
200801139 WL2C	-	-	-	-
200801139 WL2D	-	-	-	-

**3. Characteristics of all wetlands adjacent to the tributary (if any):**

**All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Findings for:** 200801139 RPW2, 200801139 WL2A, 200801139 WL2B, 200801139 WL2C, 200801139 WL2D

Wetlands are part of the head water network of Roan Creek, a major tributary to the Watauga River. Fill in the wetlands could result in decreased water quality for both Roan Creek and the Watauga River.

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

**1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Wetland Name	Flow	Explain
200801139 RPW2	SEASONAL	-

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801139 RPW2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	85.344	-
<b>Total:</b>		<b>85.344</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**



Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
200801139 WL2A	SEASONAL	-
200801139 WL2B	SEASONAL	-
200801139 WL2C	SEASONAL	-
200801139 WL2D	SEASONAL	-

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801139 WL2A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	210.436512
200801139 WL2B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	40.46856
200801139 WL2C	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	48.562272
200801139 WL2D	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	493.716432
Total:		0	793.183776

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>  
Not Applicable.

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird

Rule" (MBR):

☐

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

## SECTION IV: DATA SOURCES.

### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	Brushy Fork Consulting	23-Sep-2008
----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Zionville, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	provided by Brushy Fork Consulting	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 7-Aug-2008	-

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 23-Sep-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01139-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Johnson  
City:  
Lat: 36.344728058951965  
Long: -81.71242383906077  
Universal Transverse Mercator: 17N  
Name of nearest waterbody: Roan Creek  
Name of nearest Traditional Navigable Water (TNW): Watauga River  
Name of watershed or Hydrologic Unit Code (HUC): 6010103



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 29-Sep-2008



☐ 07-Aug-2008

Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
200801139 RPW1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200801139 WL1A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200801139 WL1B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m²)  
Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: [ ]  
OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW  
Not Applicable.

2. Wetland Adjacent to TNW  
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:  
Watershed size: 870 square miles  
Drainage area: 60 acres  
Average annual rainfall: 51 inches  
Average annual snowfall: 30 inches

(ii) Physical Characteristics

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.  
☒ Tributary flows through [ ] tributaries before entering TNW.  
:Number of tributaries  
  
Project waters are 10-15 river miles from TNW.  
Project waters are 1 (or less) river miles from RPW.  
Project Waters are 5-10 aerial (straight) miles from TNW.  
Project waters are 1 (or less) aerial(straight) miles from RPW.  
  
☐  
Project waters cross or serve as state boundaries.  
Explain:  
Identify flow route to TNW:<sup>5</sup>  
Unnamed tributary to Roan Creek to Watauga River (Watauga Lake)

Tributary Stream Order, if known:

Order	Tributary Name
1	200801139 RPW1

(b) General Tributary Characteristics:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain

200801139 RPW1	X	-	-	-	-
----------------	---	---	---	---	---

**Tributary properties with respect to top of bank (estimate):**

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801139 RPW1	2	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801139 RPW1	X	X	-	-	-	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801139 RPW1	stable	no pools. Steep slope.	Relatively straight	10

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801139 RPW1	Intermittent but not seasonal flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200801139 RPW1	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801139 RPW1	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801139 RPW1	X	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
200801139 RPW1	Clear	unknown

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801139 RPW1	-	-	X	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
200801139 WL1A	.07	emergent	-	-
200801139 WL1B	.09	Emergent	-	-

**(b) General Flow Relationship with Non-TNW:****Flow is:**

Wetland Name	Flow	Explain
200801139 WL1A	Intermittent flow.	-
200801139 WL1B	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200801139 WL1A	Overland sheetflow	-
200801139 WL1B	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801139 WL1A	Unknown	-	-
200801139 WL1B	Unknown	-	-

**(c) Wetland Adjacency Determination with Non-TNW:**

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200801139 WL1A	Yes	-	-	-
200801139 WL1B	Yes	-	-	-

**(d) Proximity (Relationship) to TNW:**

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200801139 WL1A	10-15	5-10	Wetland to navigable waters	-
200801139 WL1B	10-15	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Wetland Name	Explain	Identify specific pollutants, if known
200801139 WL1A	-	-
200801139 WL1B	-	-

**(iii) Biological Characteristics. Wetland supports:**

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200801139 WL1A	-	-	-	-
200801139 WL1B	-	-	-	-

**3. Characteristics of all wetlands adjacent to the tributary (if any):**

**All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Findings for:** 200801139 RPW1, 200801139 WL1A, 200801139 WL1B

Wetlands are part of the head water network of Roan Creek, a major tributary to the Watauga River. Fill in the wetlands could result in decreased water quality for both Roan Creek and the Watauga River.

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

### 1. TNWs and Adjacent Wetlands:

Not Applicable.

### 2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
200801139 RPW1	SEASONAL	-

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801139 RPW1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	143.256	-
<b>Total:</b>		<b>143.256</b>	<b>0</b>

### 3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

### 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
200801139 WL1A	SEASONAL	-
200801139 WL1B	SEASONAL	-

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801139 WL1A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	295.420488
200801139 WL1B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	376.357608
<b>Total:</b>		<b>0</b>	<b>671.778096</b>

### 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

### 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>  
Not Applicable.

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:  
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.  
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD  
(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-
----Office does not concur with data sheets/delineation report	Brushy Fork Environmental	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Zionville, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	provided by Brushy Fork	-
--Photographs	-	-



----Aerial	ORM2	-
----Other	COE 7-Aug-2008	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 31-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01600-JD2

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Carter  
City:  
Lat: 36.19707  
Long: -82.105  
Universal Transverse Mercator Folder UTM List  
*UTM list determined by folder location*  
▶ NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
▶ NAD83 / UTM zone 37S  
Name of nearest waterbody: George Creek  
Name of nearest Traditional Navigable Water (TNW): Doe River  
Name of watershed or Hydrologic Unit Code (HUC): 6010103



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 04-Nov-2008



Field Determination Date(s): ☐ 15-Oct-2008

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
------------	-----------------------

200801600: UT-2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200801600:WL2	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: (m²)  
Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]  
OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

**1.TNW**  
Not Applicable.

**2. Wetland Adjacent to TNW**  
Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: 870 square miles  
Drainage area: 60 acres  
Average annual rainfall: 51 inches  
Average annual snowfall: 30 inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

☐ Tributary flows directly into TNW.  
☒ Tributary flows through [ ] tributaries before entering TNW.  
:Number of tributaries

Project waters are 1-2 river miles from TNW.  
Project waters are 1 (or less) river miles from RPW.  
Project Waters are 1 (or less) aerial (straight) miles from TNW.  
Project waters are 1 (or less) aerial(straight) miles from RPW.

☐  
Project waters cross or serve as state boundaries.  
Explain:  
Identify flow route to TNW:<sup>5</sup>  
Unnamed tributary to George Creek to Doe River

**Tributary Stream Order, if known:**

Order	Tributary Name
1	200801600: UT-2

**(b) General Tributary Characteristics:****Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200801600: UT-2	-	-	-	X	agricultural impacts

**Tributary properties with respect to top of bank (estimate):**

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200801600: UT-2	2	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200801600: UT-2	X	X	-	-	-	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200801600: UT-2	impacted by agricultural activities	no flow at time of site visit	Relatively straight	5

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200801600: UT-2	Seasonal flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200801600: UT-2	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801600: UT-2	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200801600: UT-2	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow
200801600: UT-2	X	X	-	X	-	-	-	-	-	-	-	-	

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:****Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Tributary Name	Explain	Identify specific pollutants, if known

200801600: UT-2	No flow at time of inspection	-
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**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200801600: UT-2	-	-	X	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

**Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
200801600:WL2	.18	emergent	fair	-

**(b) General Flow Relationship with Non-TNW:**

**Flow is:**

Wetland Name	Flow	Explain
200801600:WL2	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200801600:WL2	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200801600:WL2	Unknown	-	-

**(c) Wetland Adjacency Determination with Non-TNW:**

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200801600:WL2	Yes	-	-	-

**(d) Proximity (Relationship) to TNW:**

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200801600:WL2	1-2	1 (or less)	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Wetland Name	Explain	Identify specific pollutants, if known
200801600:WL2	-	unknown

**(iii) Biological Characteristics. Wetland supports:**

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200801600:WL2	-	-	-	-

**3. Characteristics of all wetlands adjacent to the tributary (if any):**

**All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Findings for: 200801600: UT-2, 200801600:WL2  
Unnamed tributary provides a short conduit for any fill in stream or wetland to reach the TNW

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:  
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
200801600: UT-2	SEASONAL	-

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801600: UT-2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	152.4	-
Total:		152.4	0

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
200801600:WL2	SEASONAL	-

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
200801600:WL2	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	712.246656
Total:		0	712.246656

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**☐

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

☐

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

**SECTION IV: DATA SOURCES.****A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-
----Office concurs with data sheets/delineation report	Brushy Fork Environment Consulting	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	White Rocks Mountain, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	Supplied by consultant	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 15-Oct-2008	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

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<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.